

USA - Reference Standards

For purposes of comparison with the national standards summarised in this notebook, we provide here similar information for the United States:

1. ASHRAE:

The current ASHRAE standard, "Ventilation for Acceptable Indoor Air Quality" (ASHRAE 62-1989), provides for a ventilation rate of 10 l/s of outdoor air per person (20 cfm per person) in offices. This single rate replaces the differential rates for smoking and non-smoking spaces in the superseded Standards 62-1981.

2. OSHA:

The Occupational Safety and Health Administration (OSHA) in the Labor Department employs the following workplace exposure limits:

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<u>Chemical</u>	<u>OSHA Permissible Exposure Limit</u>	
Ammonia	50	ppm
Carbon Monoxide	35	ppm
Formaldehyde	3.0	ppm
Oxides of Nitrogen	5.0	ppm
Respirable Suspended Particulates	5	mg/m ³
Alkanes	50	ppm
Benzene	1	ppm
Sulphur Dioxide	2	ppm
Nicotine	0.07	ppm
Benzo[a]pyrene	0.02	ppm

These values are set forth in Table 3 of Pedelty & Holcomb, "A Computer Simulation of Indoor Air Quality Which Models Changes in Point Sources and Ventilation," 11 Environmental Technology 1053-1062 (1992). The values in ppm can be converted to a mg/m³ formula when comparing them with the European standards that are expressed in that form.

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